

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)

Development of Nationwide Broadband Data to)
Evaluate Reasonable and Timely Deployment)
of Advanced Services to All Americans,)
Improvement of Wireless Broadband)
Subscribership Data, and Development of Data)
on Interconnected Voice over Internet Protocol)
(VoIP) Subscribership)

WC Docket No. 07-38

**COMMENTS OF VERIZON AND VERIZON WIRELESS ON FURTHER NOTICE OF
PROPOSED RULEMAKING CONCERNING BROADBAND MAPPING**

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**COMMENTS OF VERIZON¹ AND VERIZON WIRELESS ON FURTHER NOTICE OF
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INTRODUCTION AND SUMMARY

The recent changes to the Commission's broadband reporting requirements will provide the Commission with a tremendous amount of new data concerning the broadband marketplace – including subscriber counts by speed tier and technology at the census tract level. This detailed and granular data will provide the public, the Commission, and other policymakers with a thorough understanding of the broadband marketplace nationwide and provide the Commission with data that could be used to create maps showing broadband subscribership down to the census tract level (a proxy for availability that could be used to identify unserved areas). These new reporting requirements obviate the need for additional, burdensome reporting requirements, which would be necessary for the Commission to create a nationwide broadband availability map.

¹ The Verizon companies participating in this filing ("Verizon") are the regulated, wholly owned subsidiaries of Verizon Communications Inc.

Rather than imposing ever more onerous reporting obligations on broadband providers in this competitive marketplace in order to identify the small minority of people lacking access to broadband, the Commission should encourage the ground-level efforts of public-private partnerships like ConnectKentucky that are already effectively doing such work. In particular, the Commission should assist these state-level efforts by acting as a national clearinghouse for the maps they create and by helping to compile best practices for state-level mapping efforts. That would be a more efficient and effective use of the Commission's and providers' resources, and would obviate the need for the Commission to engage in the difficult and resource-intensive process of mapping availability on its own.

Any Commission effort to mimic the work of state-level public-private partnerships through the use of federal regulation and reporting obligations would be ineffective and affirmatively counter-productive. Public-private partnerships have been successful precisely because they involve a grassroots, ground-level effort to obtain a full and accurate picture of an area's broadband resources, as well as to understand the various supply-side and demand-side factors at play. These partnerships are able to consider not only the services offered by large providers of broadband services, but also to identify and assist small or upstart broadband providers – including wireless Internet service providers, rural telephone companies and cooperatives, and municipal broadband projects – unlikely to be captured effectively by any federal-level mapping efforts. Furthermore, if the Commission suggests that it will create a nationwide map of broadband availability, such an action alone would likely undermine the strong momentum that currently exists to use state-level public-private partnerships not only to map broadband availability but also to develop workable solutions to fill gaps in broadband availability.

If the Commission nonetheless decides to attempt to create its own nationwide map, it should ensure that all broadband providers – and not just large broadband providers that currently allow potential customers to check broadband availability on their web sites – provide information concerning availability in order to make its map as accurate and complete as possible. Moreover, in order to simplify an already challenging task, the Commission should not require providers to give the Commission real-time access to the various databases used to predict broadband availability – a complex task for even a single provider, much less in the case of multiple providers relying on different systems and approaches – but instead should rely on a periodic “snapshot” from providers that indicates where broadband is likely available at a point in time.

Finally, the Commission should not require the identification of addresses where mobile broadband services may be available – an exercise that would fail to take into account the nature and use of mobile services – but instead should rely on the coverage maps routinely produced by most providers of mobile broadband services.

I. The Recently Adopted Reporting Obligations Will Provide a Robust Picture of the Broadband Marketplace.

Before considering additional steps to increase information available to the public and to policymakers concerning the broadband marketplace, the Commission should first consider and review the results of the revisions to its broadband reporting rules that it recently adopted. These new reporting obligations on broadband providers will increase exponentially the data available to the Commission concerning the broadband services that consumers purchase. Among other things, the Commission will receive the number of wireline broadband subscribers within each census tract, as well as information concerning the speed tiers (with multiple new categories tracking combinations of upload and download speeds) and the technology of these subscribers’

services and estimates of the percentage of subscribers within the census tract that are residential customers. Likewise, the Commission will receive more granular and nuanced data from mobile broadband providers, including lists of the census tracts within their broadband service footprint in each state and the number of wireless subscribers that sign onto a data plan allowing Internet access.

These new reporting obligations will yield mountains of new data concerning the broadband marketplace, including a highly detailed view of the broadband services to which consumers subscribe and the ability to identify those areas with few, if any, broadband subscribers. With these data, the Commission could create a map reflecting broadband subscribership – a reasonable proxy for broadband availability that could effectively identify areas that are unserved or underserved.²

These data will also provide the Commission the ability to determine the broadband speeds and technologies available to consumers, and to track changes in these offerings – again down to the census tract level – over time. Moreover, the Commission will be able to compare these data to the data collected by the U.S. Census Bureau, thus permitting policymakers to gain a wealth of insight into the populations and demographics of those who subscribe to broadband services, as well as those who do not.

In light of these substantial, new reporting requirements – and the equally substantial, new burdens just placed on broadband providers – the Commission should decline to adopt additional, federal mapping obligations on broadband providers at this time. Particularly in light of the Commission’s ability to map broadband subscribership at the census tract level, the marginal benefit of creating an “availability” map could not justify the substantial effort that

² See *Connected Nation July 14 Ex Parte* at 4.

would be required of both the Commission and of broadband providers. At a minimum, the Commission should wait until after it has the opportunity to review and analyze the results of the new reporting obligations in order to determine whether additional reporting obligations are necessary and justified in light of the associated burdens and alternative sources of information such as public-private partnerships.

II. The Commission Should Encourage and Leverage, Not Undermine, State-Level Public-Private Partnerships that Map Broadband Availability.

An additional reason for the Commission not to embark on the complex and burdensome task of mapping broadband availability is that much of this work is already underway through state-level public-private partnerships. These partnerships, which offer a more comprehensive and useful approach than would be possible through a federal reporting requirement, present the most efficient way to obtain a comprehensive, timely, and useful picture of broadband availability, including detailed information concerning the location of gaps in availability. Through intensive, ground-level work, these partnerships are able to develop a complete and useful picture of where broadband is available, where it is not, and the possibilities and resources for expanding the reach of broadband in light of both supply- and demand-side factors in a particular area. If the Commission were to embark on the creation of its own broadband availability map, it would be less comprehensive, less useful, and less timely, and would also undermine the current strong momentum behind public-private partnerships. The Commission instead should encourage these grassroots efforts and build on their output by acting as a national clearinghouse for the maps created by these projects and by assisting in the compilation of best practices for broadband mapping.

Public-private partnerships, such as those run by Connected Nation, offer many benefits over Commission-led efforts to map broadband availability. First, as a practical matter, the

ground-level, solutions-based approach utilized by public-private partnerships would be difficult, if not impossible, for any federal agency to replicate. The approach of these partnerships is to undertake geographic “mapping” assessments of the availability of wireline and fixed wireless broadband services within the state, but not simply for the purpose of creating a map. Instead, these programs focus on identifying areas where broadband services are not available and developing solutions to this lack of availability, if the gap reflects unmet demand. The maps created by these partnerships – which could be collected and used by the Commission – synthesize a wealth of information, including broadband infrastructure information, population density information, and information on existing and proposed infrastructure like roads, water and radio towers, and sewer lines. The result is a map that provides all parties with detailed information on the current state of broadband deployment.

One particular advantage of these partnerships is that they are solutions-based and non-regulatory. As a result, these efforts encourage the active participation of all broadband providers, including the small, independent, or rural providers that are less likely to have or report data to the Commission concerning their broadband availability, but that are particularly important to identifying gaps in broadband deployment. Providers of all types have shown a willingness to assist these efforts by submitting data about broadband deployment, including coverage maps or other information that the partnerships may use to predict broadband availability. Providers generally are willing to share this information with these organizations because sensitive, company-specific information is subject to non-disclosure agreements and the partnership only releases aggregate coverage maps. In addition, because the partnerships are not government agencies, the information is not subject to federal or state freedom of information statutes.

The range of providers who are willing to participate in these efforts is reflected by the ConnectKentucky experience, where over 80 broadband providers – ranging from large local exchange carriers and cable companies to small Internet service providers, rural independent telephone companies and cooperatives and municipal broadband projects – have taken part.³ As a result, the maps produced by public-private partnerships are much more comprehensive and useful than any map that the Commission would be able to create on its own.

Another important difference between the work of these partnerships and the mapping effort that the Commission may be considering is that, unlike a pure mapping effort, public-private partnerships seek to find workable solutions to fill any broadband gaps, where there is unmet demand. These partnerships are positioned to take a close look at the particular supply-side and demand-side factors influencing broadband availability and adoption in the area, and seek to develop appropriate solutions to challenges on either side of this equation. They also identify local resources that could be leveraged in expanding the reach of broadband within a particular area, and identify locations where further deployment makes business sense. Also, for areas where the business case for broadband deployment might not yet exist, the partnerships consider how various funding programs and solutions might fill in broadband gaps.⁴ In order to be effective, these efforts necessarily involve close collaboration with communities, local organizations and businesses, existing or potential broadband providers, and other stakeholders – a process that would be much more difficult if approached from the federal level.

The results from this public-private partnership approach have been impressive. For example, ConnectKentucky, a public-private alliance of corporations, universities, and

³ *Connected Nation July 11 Ex Parte* at 6.

⁴ *See, e.g.,* ConnectKentucky, *Funding Opportunities*, available at http://www.connectkentucky.org/find_your_county/Funding_Opportunities.php

government entities in Kentucky, has been instrumental in increasing broadband availability from less than two-thirds of Kentucky households to greater than 95% in less than four years.⁵ It has done so by coupling current deployment data with data about demand for broadband services and suggesting solutions to fill broadband gaps either through market-based solutions or available grants and other funding mechanisms. These funding mechanisms include loans with preferential terms for broadband infrastructure construction, traffic aggregation, and the No Child Left Offline program, which repurposes used government equipment and provides it to financially needy children in the state.

Given the successes of this approach, policymakers at all levels have shown interest in spreading the state-level public-private partnership model, and there is now strong and growing momentum behind such projects. Following the approach used with ConnectKentucky, Connected Nation is now working with the states of Ohio, Tennessee, West Virginia, and South Carolina to identify and fill gaps in broadband deployment. Connected Nation has spoken with thousands of state and local leaders in these and other states and “is currently at various levels of discussion with over half of the states in the Union on extending our program to their jurisdictions.”⁶ In addition, other states, including Maine, California and Illinois have initiated similar efforts to identify areas lacking broadband.

Indeed, even federal policymakers have recognized the benefits of these state-level efforts. The Commission has itself “acknowledged the success of the ConnectKentucky initiative and its interactive mapping program,” and has recognized that this public-private partnership “has facilitated identification of areas without broadband service, and that this identification has resulted in public and private resources being focused to provide service to

⁵ *Connected Nation July 11 Ex Parte at 2.*

⁶ *Connected Nation July 14 Ex Parte at 7.*

unserved areas.”⁷ Likewise, legislation pending in Congress, if passed, would further spur the proliferation of state-level public-private partnerships. Such legislation has already been passed by House of Representatives and awaits a floor vote in the Senate following the approval of the Committee on Commerce, Science, and Transportation.⁸ These legislative efforts to fund public-private partnerships have received strong support from the broadband industry.⁹ Thus, the benefits of this ground-level, solutions-based approach have been recognized at both the state and federal level.

Particularly given the growing momentum behind these state-level efforts to assess broadband availability – and the Commission’s own recent efforts that will yield mountains of data concerning the broadband options available to and adopted by consumers – reliance on public-private partnerships would be a much more effective and efficient way to obtain useful maps of broadband availability. These state-level public-private partnerships now have considerable experience identifying the areas where broadband is and is not available, and working with local communities and the full range of broadband providers and other stakeholders to ensure that their output is comprehensive and that it is put to use.

In contrast, maps created at the federal level without the benefit of ground-level knowledge – such as maps based solely on the information that some providers may be able to produce of address-level availability – would likely be incomplete and outdated, and thus of little

⁷ Further Notice ¶ 34.

⁸ See Broadband Census of America Act of 2007, H.R. 3919, 110th Cong. §§ 4-5 (2007) (adopted by House of Representatives on Nov. 13, 2007); “Broadband Data Improvement Act,” S.1492, 110th Cong. § 6 (2007) (establishing a grant program for state broadband initiatives) (reported out of Committee on July 19, 2007).

⁹ See, Industry Letter Supporting Broadband Mapping Legislation, available at: http://www.ustelecom.org/uploadedFiles/News/News_Items/Joint.Letter.of.Support.for.Broadband.Legislation.11.JUL.08.pdf (last viewed July 17, 2008).

use to the public, the Commission, or other local, state or federal policymakers. For example, as Connected Nation recently explained in a filing with the Commission, typically “only the largest (and mostly urban) providers have” the address-level availability information that the *Further Notice* proposes to use for purposes of mapping.¹⁰ In fact, in Kentucky such information was available only “from a tiny minority of broadband providers,” and Connected Nation observed that “overwhelmingly those whose networks are located in predominantly rural areas . . . do not have this information.” *Id.* As a result, any map that relies solely on data gathered from the few providers that do maintain address-level availability data would “hav[e] broad gaps in the very rural and unserved areas that a federal mapping project is designed to identify.” *Id.* Indeed, given the difficulty of the Commission creating a comprehensive and accurate broadband *availability* map, the nationwide *subscriber* map that the Commission could create using data required under the recently revised broadband reporting requirements would be far more meaningful and useful.

Although maps created by the Commission would lack the comprehensiveness, accuracy and timeliness of those created by state-level public-private partnerships, a decision by the Commission to engage in broadband availability mapping would likely have the consequence of discouraging and supplanting many of the efforts at the state level both to produce higher-quality maps and to develop appropriate solutions to address gaps. As Connected Nation notes:

The FCC’s proposed federal mapping program would displace state-level initiatives with the promise of “broadband maps” that would be available, at the very earliest, in late 2009. In a time of tight state budgets, the promise of new federal broadband maps could make funding for state-level mapping and demand-side stimulation programs difficult. What is worse is that at the end of the day, the federal maps would be of little use, because they would only contain dated and incomplete information.¹¹

¹⁰ *Connected Nation July 14 Ex Parte* at 3.

¹¹ *Connected Nation July 14 Ex Parte* at 7-8.

Moreover, to the extent that the Commission's decision to engage in mapping did not displace state-level efforts, it would result in an unnecessary duplication of efforts – and a waste of the Commission's and broadband providers' resources – for providers cooperating with state-level public-private partnerships.

Instead of taking steps that would disrupt the good work being performed through public-private partnerships or impose unproductive burdens on broadband providers, the Commission should take action that would facilitate and expand these solutions-focused efforts. In this regard, Connected Nation suggests an appropriate role for the Commission that would build on these efforts and make them more useful for the public and for policymakers.

First, the Commission should continue to recognize the benefits of state-level public-private partnerships and should adopt a national policy to facilitate these projects.¹² Second, the Commission could act as a national clearinghouse for the output of the various state-level efforts, and could create a map of maps that puts all of this information in one place. *Id.* This would result in a more comprehensive and useful map than the Commission could create on its own, and would also avoid the unnecessary duplication of efforts (to the extent that the Commission's mapping initiative did not completely stop state-level efforts). Finally, the Commission could work in conjunction with the public-private partnerships to compile best practices for broadband availability mapping and could host regional workshops to discuss best practices for mapping broadband availability and stimulating broadband demand. *Id.* These steps would benefit and encourage comprehensive and useful mapping of broadband availability, rather than stop it in its tracks. This approach would result in a better and more useful product than would the Commission's proposed approach.

¹² *Connected Nation July 14 Ex Parte* at 6.

III. Any Commission-Generated Broadband Maps Should Be Based on Reasonable Reporting Requirements That Apply to All Broadband Providers.

In the event that the Commission decides that it will create new reporting obligations on broadband providers in order to generate its own broadband map – which, for the reasons discussed above, it should not do – the Commission should take steps to address some of the many problems with such an approach. To the extent that the Commission intends to create a map based on “information that providers use to respond to prospective customers to determine on an address-by-address basis whether service is available,”¹³ it must take into account that the existence and approach to such data will vary widely among broadband providers. Unless the Commission accounts for these variations, any resulting map would be inaccurate and misleading.

First, while reliance on the data produced by providers’ web tools indicating potential availability at the address-level may have superficial appeal, one significant problem with this approach is that it would be largely confined to the areas served by large broadband providers, and even in those areas would fail to capture all of the broadband options available to consumers. As Connected Nation has explained to the Commission, in its experience, only a “tiny minority” of providers actually has access to such data, and the providers serving rural areas are particularly unlikely to have address-level availability data.¹⁴ Given the goal of identifying unserved areas – most of which are likely to be in rural areas – this fact makes it highly unlikely that the proposed approach would result in a map useful to policymakers or the public, much less a map more accurate or useful than the one that the Commission will be able to create using the new, granular broadband subscribership data that it will receive from all facilities-based

¹³ Further Notice ¶ 35.

¹⁴ *Connected Nation July 14 Ex Parte* at 3.

broadband providers. Therefore, the Commission would need to find some way of including on the map the broadband services made available by these small, independent and rural providers in order to accurately identify actual gaps in available broadband. (Here again, the public-private partnership approach provides the best alternative, as these projects routinely work with broadband providers of all sizes in the mapping process to accurately determine availability.)

Second, even with respect to those broadband providers that make tools available on their web sites that allow subscribers or potential subscribers to check whether broadband is likely available at their location, the Commission must account for the different systems and approaches that providers use, and the potential complexity underlying these tools. For example, the predictions (not promises) concerning broadband availability that are available on Verizon's web site depend on multiple different computer systems and databases (customer databases, DSL facilities databases, FiOS facilities databases, etc.) and rely on numerous assumptions that may, in any particular case, prove inaccurate. Moreover, the systems and databases underlying this tool are constantly updated to reflect customer, network, and service changes. And while this process is complex even within Verizon, each broadband provider is likely to rely on its own, similarly complex systems and approaches in making its own predictions concerning availability. This variation and complexity make the reporting of the real-time, underlying data infeasible, both from the perspective of broadband providers and the Commission.

In light of this situation, the only practical method for a broadband provider to report address-level availability would be by providing a "snapshot" of these systems that offers a list of addresses for which a provider's systems predict that broadband is available as of a point in time. The results of such a search would, of course, result in highly confidential and competitively sensitive data – potentially including tens of millions of addresses for some

providers – and would take considerable time and resources to create. And, given the size and confidentiality of such lists, the Commission’s task of turning all broadband providers’ data into a map would be monumental.

While this “snapshot” approach would likely be the only real option for a provider attempting to report address-level availability data, the limitations of this approach – including the static picture that the resulting map would offer, the size of the databases that would be handed off to the Commission, and the competitive sensitivity of this information – again illustrate the advantages of relying on the maps created by state-level public-private partnerships. Alternatively, the Commission could create broadband *subscriber* maps – which would provide a readily available and accurate proxy for broadband availability – using the data that will be provided pursuant to the recently revised requirements.

IV. Availability of Mobile Broadband Services Should Be Based on Providers’ Digital Coverage Maps.

In the case of mobile broadband services, neither the Commission nor public-private partnerships need to do anything to map availability because wireless broadband providers already do so. Therefore, the Commission should not impose any additional reporting obligations on wireless broadband providers as part of any mapping effort.

Given the nature of mobile services and the expectations of consumers, wireless broadband providers already routinely offer granular, digital coverage maps that provide consumers and policymakers with information on where broadband services are likely to be available. Consumers and policymakers are able to search these maps to determine the likely coverage available for particular locations, generally down to the street level. These coverage maps – which are created by each wireless operator in a manner appropriate to its individual services and network – can be used to identify existing gaps in wireless broadband coverage.

While no standard approach to creating these maps exists in the wireless industry, each provider has a strong incentive to make these maps detailed and accurate in order to prevent customer confusion and frustration. In contrast, any mobile broadband mapping effort undertaken by the Commission would likely create confusion among providers and customers, due to the lack of any standard definition of mobile broadband “coverage” and the fact that the Commission’s maps would be out of date as soon as, if not before, they become available. Moreover, the providers’ coverage maps are far superior to alternative methods to tracking wireless broadband availability – including reporting based on address-level availability – given the nature of mobile services and the many factors that may affect the availability of these services at a particular location. Therefore, the existence and effectiveness of these maps remove any need for additional reporting obligations on wireless providers.

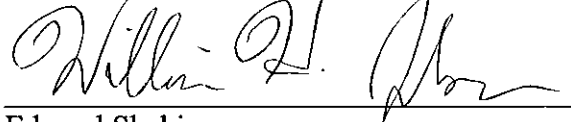
V. CONCLUSION

The Commission should decline to adopt additional reporting requirements on broadband providers, and instead should encourage the work of state-level public-private partnerships that map broadband availability.

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